

WHAT IS CLAIMED IS:

1. A positioning system for offering positioning information on the basis of a signal transmitted from a quasi-zenith satellite, wherein said signal includes another signal transmitted to said quasi-zenith satellite from a communication station after being produced as a result of processing still other signals received from a plurality of positioning satellites by multiple reference stations placed on the ground, and a positioning information offering apparatus is provided to transmit said signal sent from said quasi-zenith satellite and a positioning information of said positioning system.
2. A positioning system according to claim 1, wherein said signal transmitted from said communication station includes at least a signal resulting from processing the signals that three ones surrounding said positioning information offering apparatus, of said multiple reference stations, have transmitted, and the positioning information of said positioning information offering apparatus includes its own identification code, transmitting time, and its own position or position at the time of transmission.
3. A positioning system according to claim 1, wherein the frequency of said signal transmitted from said quasi-zenith satellite is different from that of said signal transmitted from said positioning information offering apparatus.

4. A positioning system according to claim 2, wherein the frequency of said signal transmitted from said quasi-zenith satellite is different from that of said signal transmitted from said positioning information offering apparatus.
5. A positioning system according to claim 3, wherein said signal transmitted from said positioning information offering apparatus is of 2.4-GHz band, 5-GHz band or a frequency band for mobile communication.
6. A positioning system according to claim 4, wherein said signal transmitted from said positioning information offering apparatus is of 2.4-GHz band, 5-GHz band or a frequency band for mobile communication.
7. A positioning system connected via a network to a communication station that offers positioning information, wherein a positioning information offering apparatus is provided to transmit a positioning information of said positioning system and other positioning information that is offered from said communication station after being produced by processing the signals received from a plurality of positioning satellites by multiple reference stations.
8. A positioning system for offering positioning information on the basis of a signal transmitted from a quasi-zenith satellite, wherein said signal includes another signal transmitted to said quasi-zenith satellite after being produced as a result of processing still other signals received at multiple

places from a plurality of positioning satellites, and a positioning apparatus is provided to detect a position of said positioning system by receiving a composite signal from a positioning information offering apparatus that is placed on the ground to combine said signal sent from said quasi-zenith satellite and its own positioning information and to transmit said composite signal.

9. A positioning system according to claim 1, wherein said multiple positioning satellites include at least any one of GPS satellite, GLONASS satellite, GALILEO satellite and quasi-zenith satellite.

10. A positioning system according to claim 8, wherein said multiple positioning satellites include at least any one of GPS satellite, GLONASS satellite, GALILEO satellite and quasi-zenith satellite.

11. A positioning system according to claim 1, wherein said signal transmitted from said quasi-zenith satellite has its transmission channel changed according to the reference stations that have received signals from said positioning satellites.

12. A positioning system according to claim 11, wherein said positioning information offering apparatus selectively changes the receiving channel of said signal transmitted from said quasi-zenith satellite according to the reference stations disposed around said apparatus.

13. A positioning system according to claim 8,

wherein said signal transmitted from said quasi-zenith satellite changes the transmission channel according to the reference stations that have received the signals from said positioning satellites, and said positioning apparatus receives the signal produced from said positioning information offering apparatus that has selectively changed the receiving channel of said signal according to the reference stations disposed around said positioning information offering apparatus.

14. A positioning information offering method for offering positioning information on the basis of a signal transmitted from a quasi-zenith satellite, wherein said signal includes another signal transmitted to said quasi-zenith satellite from a communication station after being produced as a result of processing still other signals received from a plurality of positioning satellites by multiple reference stations placed on the ground, and a positioning information offering apparatus is provided to transmit said signal sent from said quasi-zenith satellite and a positioning information of said positioning system.

15. A positioning information offering method comprising the steps of:

receiving positioning-information by an apparatus from a communication station after processing signals received by a plurality of reference stations from multiple positioning satellites; and transmitting said positioning information and other

positioning information of said apparatus.

16. A positioning information offering method for offering positioning information on the basis of a signal transmitted from a quasi-zenith satellite, wherein said signal includes another signal transmitted to said quasi-zenith satellite after being produced as a result of processing still other signals received at multiple places from a plurality of positioning satellites, and a positioning apparatus is provided to detect position by receiving a composite signal from a positioning information offering apparatus that is placed on the ground to combine said signal sent from said quasi-zenith satellite and positioning information and to transmit said composite signal.